MBR

MULTI-POSITION
MULTI-SPEED PSC MOTOR
MODULAR BLOWER
1½ TO 5 TONS

Product Features

- Direct drive, multi-speed PSC blower motor
- 3 kW – 21 kW electric heat kits
- Blower section usable as electric heater
- Horizontal or vertical configuration capabilities
- 21" depth for easier attic access
- Foil-faced insulation covers the internal casing to reduce cabinet condensation
- Galvanized, leather grain-embossed finish
- AHRI certified; ETL listed

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12 YEAR PARTS LIMITED WARRANTY*

AHRI CERTIFIED

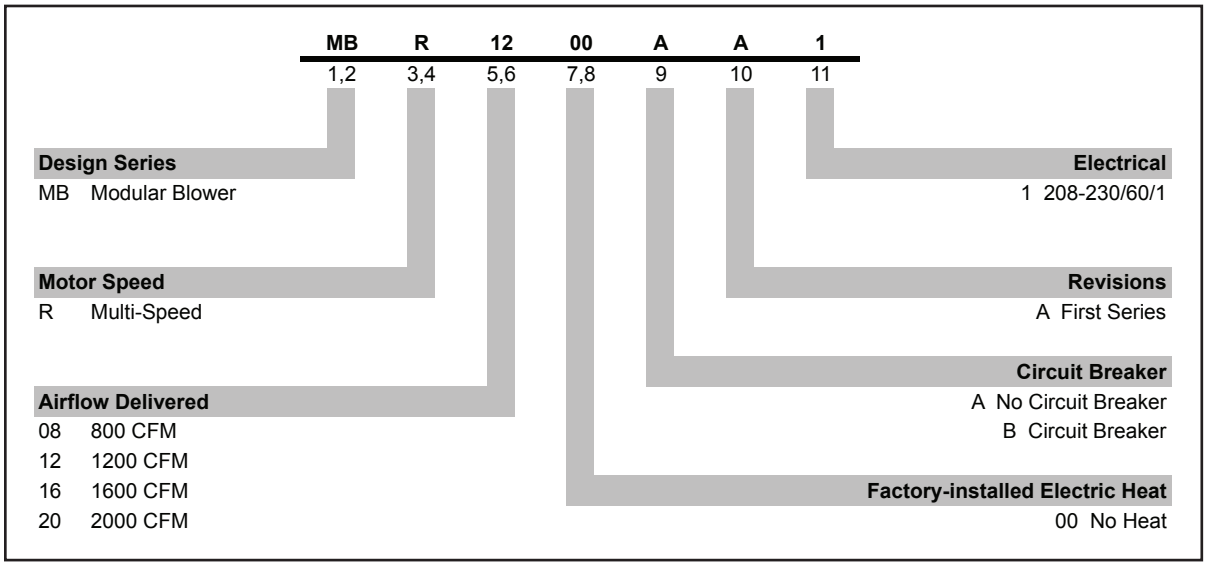
ETL LISTED

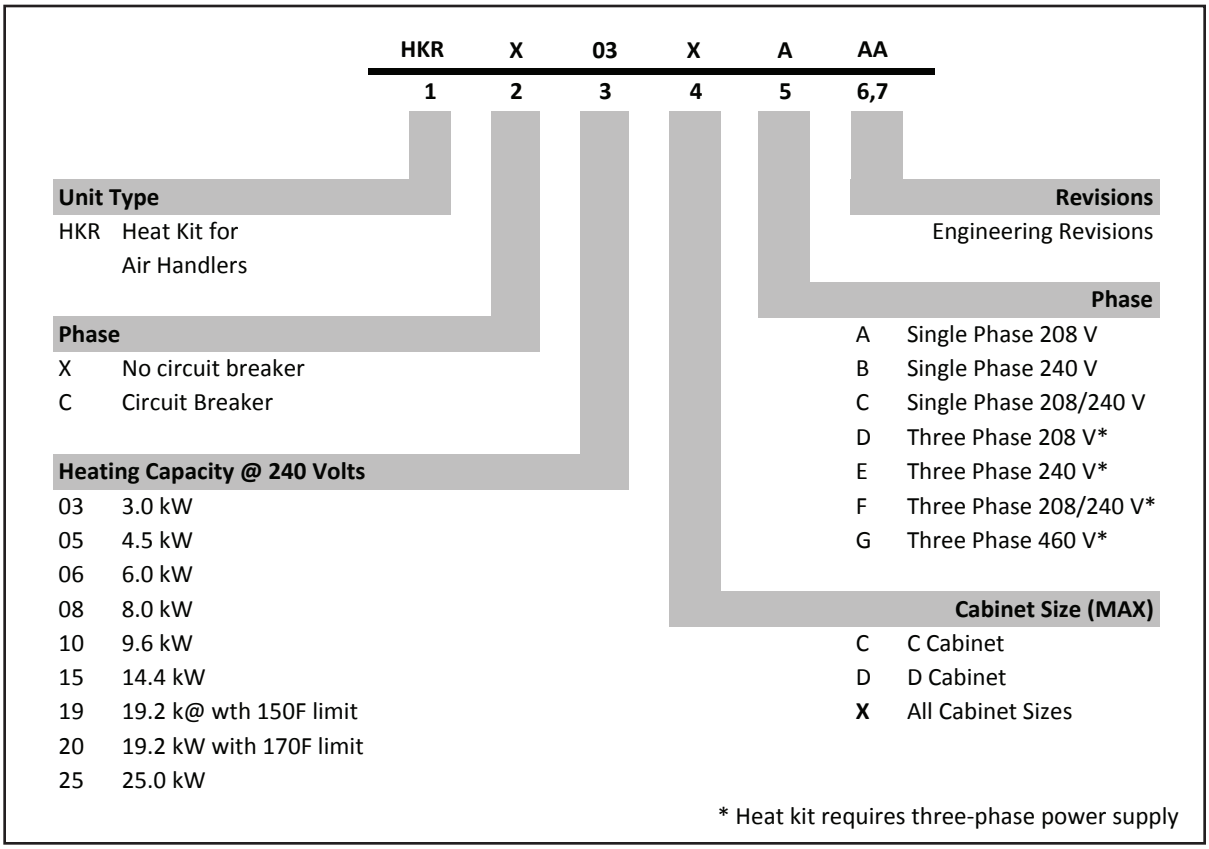
ISO 9001 QUALITY MANAGEMENT SYSTEM GLOBAL QUALITY STANDARDS

ISO 14001 CERTIFIED ENVIRONMENTAL MANAGEMENT SYSTEM

* Complete warranty details available from your local dealer or at www.daikincomfort.com. To receive the 12-Year Parts Limited Warranty, online registration must be completed within 60 days of installation. Online registration is not required in California or Quebec.

NOMENCLATURE





HEATING KW CORRECTION FACTOR

SUPPLY VOLTAGE	240	230	220	210	208
CORRECTION FACTOR	1.00	0.92	0.84	0.77	0.75

Multiply the 240-volt heating capacity by correction factors.

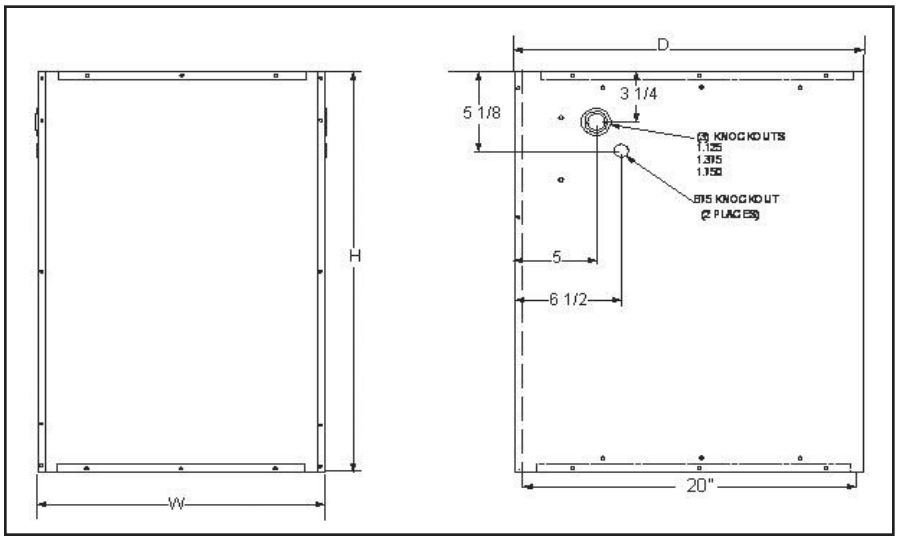
SPECIFICATIONS

MODEL	MBR0800AA-1	MBR1200AA-1	MBR1600AA-1	MBR2000AA-1
BLOWER				
Diameter	9"	9"	10"	10"
Width	6"	8"	8"	10"
ELECTRICAL DATA				
Voltage	208 / 230	208/230	208 / 230	208 / 230
Min Circuit Ampacity	1.9	3	3.8	4.9
Max. Overcurrent Device (Amps)	15	15	15	15
Blower Motor				
Horsepower (HP)	¼	⅓	⅓	½
SHIP WEIGHT (LBS.)	62	62	73	84

- Minimum Circuit Ampacity (MCA) and Maximum Overcurrent Protection (MOP) for blower without supplemental heat installed. Refer to unit nameplate for these specifications with approved accessory heaters installed.

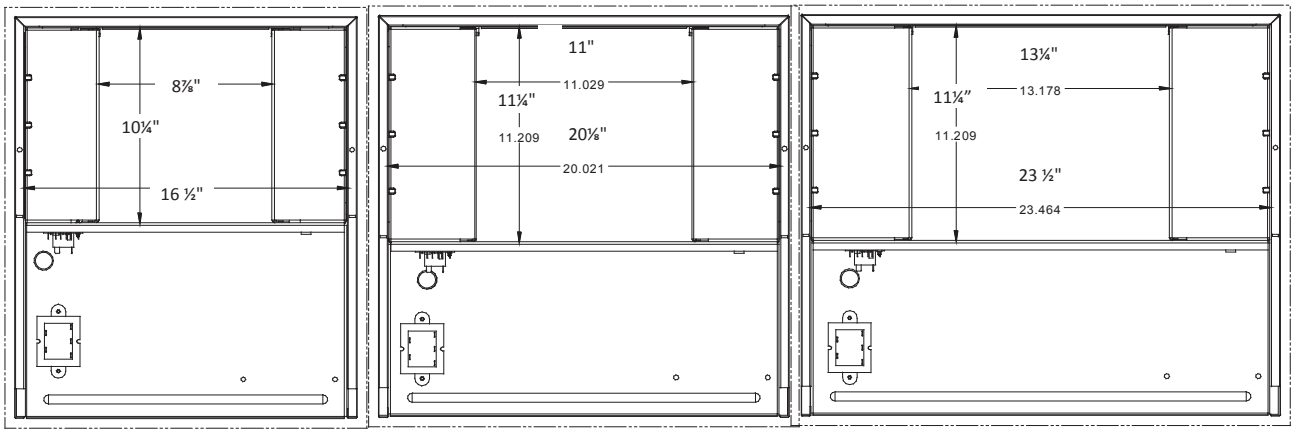
DIMENSIONS

SIDE AND FRONT VIEWS



	W	H	D
MBR0800*	17½"	26"	21"
MBR1200*	17½"	26"	21"
MBR1600*	21"	30"	21"
MBR2000*	24½"	30"	21"

TOP VIEW



17½" **21"** **24½"**

AIRFLOW DATA

SPEED	STATIC	MBR0800**-* SCFM	MBR1200**-* SCFM	MBR1600**-* SCFM	MBR2000**-* SCFM
High	0.1	1,240	1,500	1,800	2,160
	0.2	1,170	1,460	1,740	2,080
	0.3	1,120	1,360	1,680	1,990
	0.4	1,060	1,280	1,610	1,890
	0.5	980	1,200	1,520	1,790
	0.6	900	1,110	1,430	1,690
Medium	0.1	900	1,380	1,540	1,730
	0.2	850	1,320	1,490	1,670
	0.3	790	1,270	1,450	1,590
	0.4	740	1,200	1,400	1,520
	0.5	680	1,140	1,350	1,420
	0.6	605	1,040	1,280	1,320
Low	0.1	650	1,170	1,130	1,520
	0.2	590	1,130	1,100	1,450
	0.3	540	1,080	1,070	1,360
	0.4	500	1,020	1,030	1,290
	0.5	430	950	990	1,200
	0.6	330	830	930	1,090

NOTES

- The chart is for information only. For satisfactory operation, external static pressure must not exceed value shown on rating plate.
- Use the CFM adjustment factors of .98 for horizontal left, .95 for horizontal right & .96 for downflow orientations.

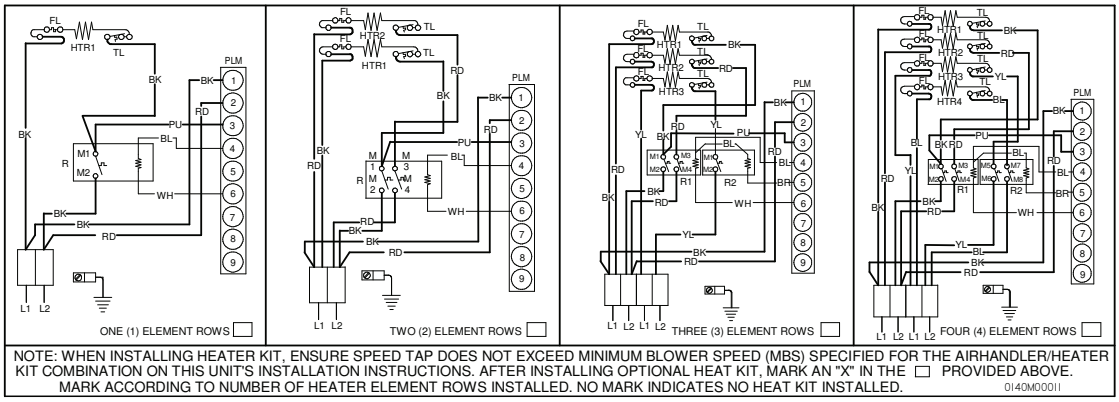
HEAT KIT DATA

Models	Circuit 1			Circuit 2			Single-Point Kit	
	Heater Amps	MCA[1]	MOP[2]	Heater Amps	MCA[1]	MOP[2]	MCA[1]	MOP[2]
MBR0800AA-1 **	0 / 0	1.9 / 1.9	15 / 15	---	---	---	---	---
HKR-03*	10.8 / 12.5	15.4 / 18	20 / 20	---	---	---	---	---
HKR-05* / 05C*	17.2 / 19.8	23 / 27	25 / 30	---	---	---	---	---
HKR-06*	21.7 / 25.0	29 / 33	30 / 35	---	---	---	---	---
HKR-08* / -08C*	25.3 / 29.2	33 / 38	35 / 40	---	---	---	---	---
HKR-10* / -10C*	34.3 / 39.6	45 / 51	45/ 60	---	---	---	---	---
MBR1200AA-1 **	0 / 0	3.0 / 3.0	15 / 15	---	---	---	---	---
HKR-03*	10.8 / 12.5	17 / 19	20 / 20	---	---	---	---	---
HKR-05* / 05C*	17.2 / 19.8	24 / 28	25 / 30	---	---	---	---	---
HKR-06*	21.7 / 25.0	30.1 / 34	35 / 40	---	---	---	---	---
HKR-08* / -08C*	25.3 / 29.2	35 / 39	35 / 40	---	---	---	---	---
HKR-10* / -10C*	34.3 / 39.6	46 / 52	50 / 60	---	---	---	---	---
HKA-15C*	34.3 / 39.6	46 / 52	50 / 60	17.2 / 19.8	21 / 25	25 / 25	67/77	70 / 80
HKA-20C*	34.3 / 39.6	46 / 52	50 / 60	34.3 / 39.6	43 / 49	45 / 50	89/102	90 / 110
^HKR3-15*	0 / 0	3.0 / 3.0	15 / 15	31.3 / 36.1	39 / 45.1	40 / 50	---	---
^HKR3-20*	0 / 0	3.0 / 3.0	15 / 15	40.7 / 46.9	51 / 59	60 / 60	---	---
MBR1600AA-1 **	0 / 0	3.8 / 3.8	15 / 15	---	---	---	---	---
HKR-03*	10.8 / 12.5	17 / 19	20 / 20	---	---	---	---	---
HKR-05* / 05C*	17.2 / 19.8	25.2 / 28	30 / 30	---	---	---	---	---
HKR-06*	21.7 / 25.0	31 / 35	35 / 35	---	---	---	---	---
HKR-08* / -08C*	25.3 / 29.2	35.3 / 40.2	40 / 45	---	---	---	---	---
HKR-10* / -10C*	34.3 / 39.6	47 / 53	50 / 60	---	---	---	---	---
HKA-15C*	34.3 / 39.6	47 / 53	50 / 60	17.2 / 19.8	21 / 25	25 / 25	68/78	70 / 80
HKA-20C*	34.3 / 39.6	47 / 53	50 / 60	34.3 / 39.6	43 / 49	45 / 50	90/103	90 / 110
^HKR3-15*	0 / 0	3.8 / 3.8	15 / 15	31.3 / 36.1	39 / 45.1	60 / 60	---	---
^HKR3-20*	0 / 0	3.8 / 3.8	15 / 15	40.7 / 46.9	51 / 59	60 / 60	---	---
MBR2000AA-1 **	0 / 0	4.9 / 4.9	15 / 15	---	---	---	---	---
HKR-03*	10.8 / 12.5	18 / 21	20 / 25	---	---	---	---	---
HKR-05* / 05C*	17.2 / 19.8	26 / 30	30 / 35	---	---	---	---	---
HKR-06*	21.7 / 25.0	32 / 36	35 / 40	---	---	---	---	---
HKR-08* / -08C*	25.3 / 29.2	36 / 41	40 / 45	---	---	---	---	---
HKR-10* / -10C*	34.3 / 39.6	48 / 54	50 / 60	---	---	---	---	---
HKA-15C*	34.3 / 39.6	48 / 54	50 / 60	17.2 / 19.8	21 / 25	25 / 25	69/79	70 / 80
HKA-20C*	34.3 / 39.6	48 / 54	50 / 60	34.3 / 39.6	43 / 49	45 / 50	91/104	100 / 110
^HKR3-15*	0 / 0	4.9 / 4.9	15 / 15	31.3 / 36.1	39 / 45.1	40 / 50	---	---
^HKR3-20*	0 / 0	4.9 / 4.9	15 / 15	40.7 / 46.9	51 / 59	60 / 60	---	---

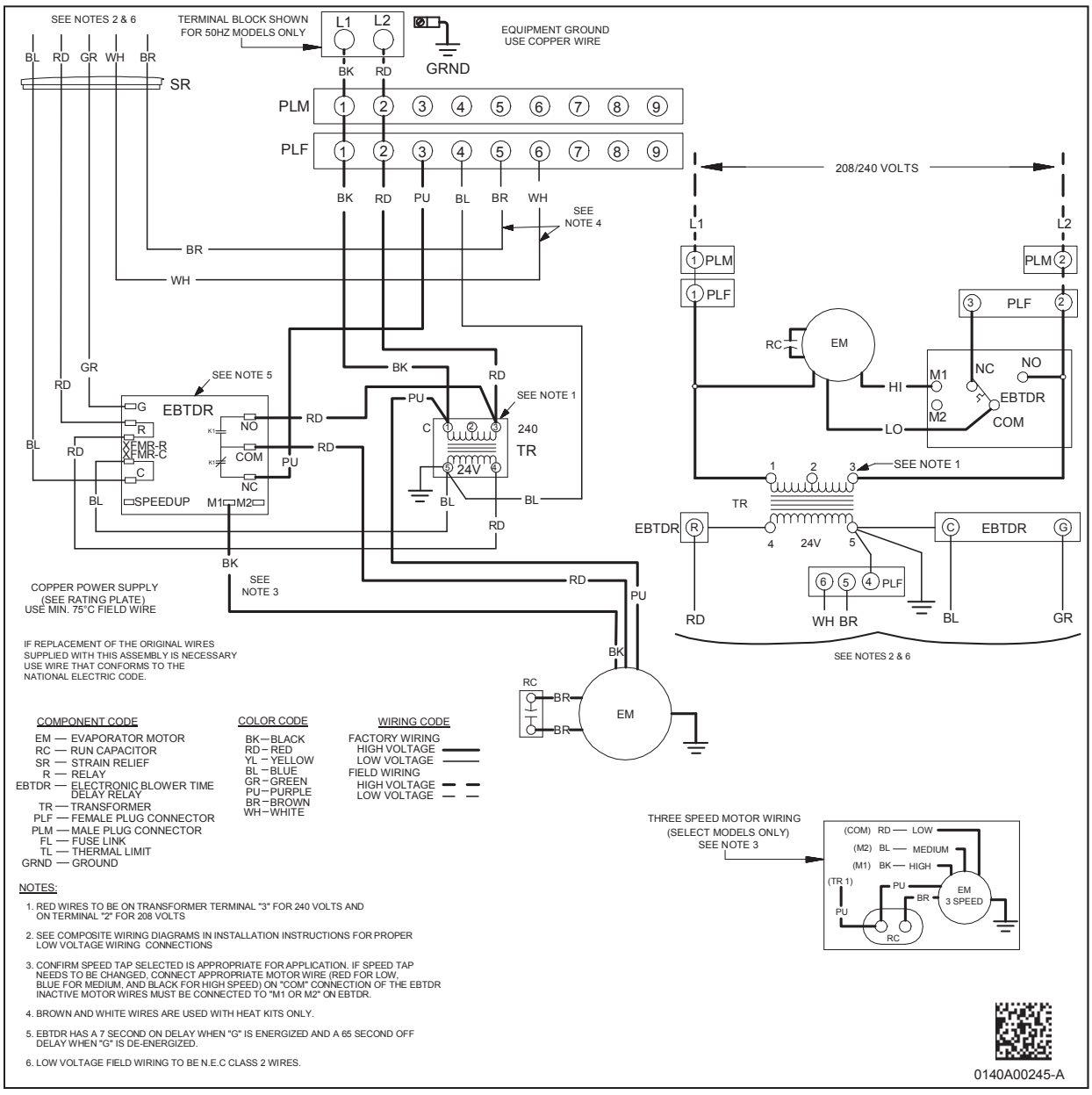
All ampacities noted above include air handler motor amps
Circuit 1: Single-phase for Air Handlers / Circuit 2: Three-phase for HKR3 Heater Kits
[1] Minimum Circuit Ampacity (Heater Amps + Motor Amps) X 1.25
[2] Maximum Overcurrent Protection = 2.25 X Motor Amps + Heater Amps

* Revision level that may or may not be designated
C = Circuit Breaker Option
--- indicates Not Required
HKA meets the new UL1995 requirements for 15 and 20KW heaters
- Only applicable when HKA kits are included in table
- MBVC and MBR models

WIRING DIAGRAM – AIR HANDLER



NOTE: WHEN INSTALLING HEATER KIT, ENSURE SPEED TAP DOES NOT EXCEED MINIMUM BLOWER SPEED (MBS) SPECIFIED FOR THE AIRHANDLER/HEATER KIT COMBINATION ON THIS UNIT'S INSTALLATION INSTRUCTIONS. AFTER INSTALLING OPTIONAL HEAT KIT, MARK AN "X" IN THE ☐ PROVIDED ABOVE. MARK ACCORDING TO NUMBER OF HEATER ELEMENT ROWS INSTALLED. NO MARK INDICATES NO HEAT KIT INSTALLED. 0140M00011



COMPONENT CODE

EM — EVAPORATOR MOTOR
RC — RUN CAPACITOR
SR — STRAIN RELIEF
R — RELAY
EBTDR — ELECTRONIC BLOWER TIME DELAY RELAY
TR — TRANSFORMER
PLF — FEMALE PLUG CONNECTOR
PLM — MALE PLUG CONNECTOR
FL — FUSE LINK
TL — THERMAL LIMIT
GRND — GROUND

COLOR CODE

BK—BLACK
RD—RED
YL—YELLOW
BL—BLUE
GR—GREEN
PU—PURPLE
BR—BROWN
WH—WHITE

WIRING CODE

FACTORY WIRING
HIGH VOLTAGE
LOW VOLTAGE
FIELD WIRING
HIGH VOLTAGE
LOW VOLTAGE

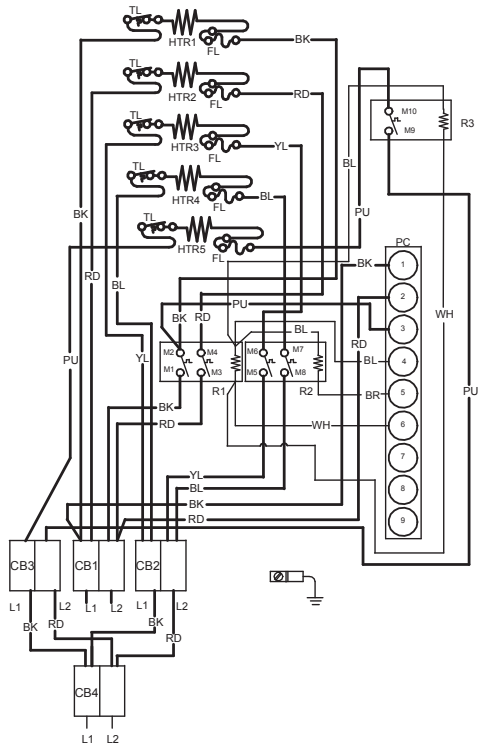
NOTES:

1. RED WIRES TO BE ON TRANSFORMER TERMINAL "3" FOR 240 VOLTS AND ON TERMINAL "2" FOR 208 VOLTS
2. SEE COMPOSITE WIRING DIAGRAMS IN INSTALLATION INSTRUCTIONS FOR PROPER LOW VOLTAGE WIRING CONNECTIONS
3. CONFIRM SPEED TAP SELECTED IS APPROPRIATE FOR APPLICATION. IF SPEED TAP NEEDS TO BE CHANGED, CONNECT APPROPRIATE MOTOR WIRE (RED FOR LOW, BLUE FOR MEDIUM, AND BLACK FOR HIGH SPEED) ON "COM" CONNECTION OF THE EBTDR INACTIVE MOTOR WIRES MUST BE CONNECTED TO "M1 OR M2" ON EBTDR.
4. BROWN AND WHITE WIRES ARE USED WITH HEAT KITS ONLY.
5. EBTDR HAS A 7 SECOND ON DELAY WHEN "G" IS ENERGIZED AND A 65 SECOND OFF DELAY WHEN "G" IS DE-ENERGIZED.
6. LOW VOLTAGE FIELD WIRING TO BE N.E.C CLASS 2 WIRES.

Wiring is subject to change. Always refer to the wiring diagram on the unit for the most up-to-date wiring.

⚠ WARNING — **High Voltage:** Disconnect all power before servicing or installing this unit. Multiple power sources may be present. Failure to do so may cause property damage, personal injury, or death. ⚡

WIRING DIAGRAM – 5 ELEMENT HEATER KIT



COMPONENT CODE

PC = 9 PIN CONNECTOR
HTR = HEATER ELEMENT
TL = THERMAL LMT
RS = RELAY/SEQUENCER
TB = TERMINAL BLOCK
CB = CIRCUIT BREAKER
CC = CONTACTOR
FL = FUSE LINK
EM = EVAPORATOR MOTOR
EBTDR = ELEC. BLOWER TIME DELAY
RC = RUN CAPACITOR
TR = TRANSFORMER
SR = STRAIN RELIEF

WIRING CODE:

HIGH VOLTAGE ——————
LOW VOLTAGE ——————

COLOR CODE

BK = BLACK
BL = BLUE
BR = BROWN
GR = GREEN
OR = ORANGE
PK = PINK
PU = PURPLE
RD = RED
WH = WHITE
YL = YELLOW

NOTE: WHEN INSTALLING HEATER KIT, ENSURE SPEED TAP MUST EXCEED OR EQUAL THE MINIMUM BLOWER SPEED (MBS) SPECIFIED FOR THE AIRHANDLER / HEATER KIT COMBINATION ON THIS UNIT'S SERIAL PLATE. AFTER INSTALLING OPTIONAL HEAT KIT, MARK AN "X" IN THE ☐ PROVIDED BELOW.
NO MARK INDICATES NO HEAT KIT INSTALLED.

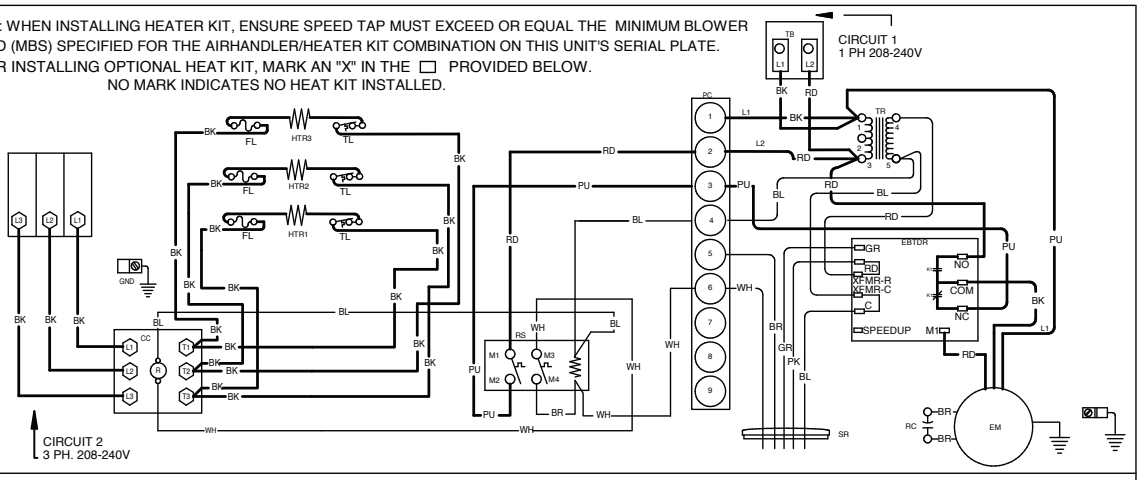
FIVE (5) ELEMENT ROWS ☐

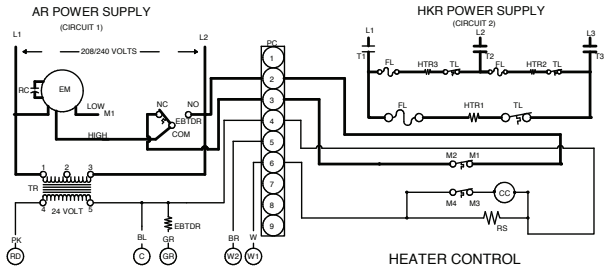
NOTE:-
THIS LABEL MUST BE ATTACHED ON THE AIRHANDLER IN A PROMINENT LOCATION

0I40M00274-A

WIRING DIAGRAM – 3 PHASE HEATER KIT

NOTE: WHEN INSTALLING HEATER KIT, ENSURE SPEED TAP MUST EXCEED OR EQUAL THE MINIMUM BLOWER SPEED (MBS) SPECIFIED FOR THE AIRHANDLER/HEATER KIT COMBINATION ON THIS UNIT'S SERIAL PLATE. AFTER INSTALLING OPTIONAL HEAT KIT, MARK AN "X" IN THE ☐ PROVIDED BELOW.
NO MARK INDICATES NO HEAT KIT INSTALLED.





NOTE:-
THIS LABEL MUST BE ATTACHED ON THE AIRHANDLER IN A PROMINENT LOCATION

COMPONENT CODE

HTR — HEAT ELEMENT
EM — EVAPORATOR MOTOR
EBTDR — ELEC. BLOWER TIME DELAY RELAY
RS — RELAY/SEQUENCER
RC — RUN CAPACITOR
TL — THERMAL LIMIT
TR — TRANSFORMER
TB — TERMINAL BLOCK
CC — CONTACTOR
PC — 9-PIN CONNECTOR
SR — STRAIN RELIEF
FL — FUSE LINK
CB — CIRCUIT BREAKER

WIRING CODE

HIGH VOLTAGE ——————
LOW VOLTAGE ——————

COLOR CODE

BK BLACK
BL BLUE
BR BROWN
GR GREEN
OR ORANGE
PK PINK
PU PURPLE
RD RED
WH WHITE
YL YELLOW

0140M00273-A

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